

Kendrick, Bret

From: Humphrey, Marvelyn
Sent: Wednesday, August 17, 2016 5:08 PM
To: Allen, Bob (PCS)
Cc: Kendrick, Bret; latrice.babin@pcs.hctx.net
Subject: Data Review Report, 7-21-16 Resampling, WO_533740
Attachments: Data Review Report 7-21-16 Resampling WO#533740.pdf; DST_7-21-16 Resample_WO#533740.xlsx

Bob,

Attached is the Highlands Private Wells data review report for the 7-21-16 resample event.

Also attached is an excel spreadsheet of the validated lab results with the data review qualifiers.

Lastly, after speaking to Latrice last week, I realized that you are using the resampling date as an “identifier” for the various resampling projects. We did not include the resampling date on the first two data review reports that we provided; we used a different identifier, which may be confusing and hard to track. If you would like, I can reissue the first two data review reports to include the resampling date as the project number/identifier. I can also reissue the data review spreadsheet and provide an excel file similar to the attached. My understanding is that the data review pdf spreadsheet that we provided with the previous reports was not as useful as we had hoped. I believe you may have had a bit of difficulty going back and forth between your mega-excel spreadsheet and the data review spreadsheet to determine the qualification and usability of the reported lab results. You should be able to import the attached excel file into your mega excel file, if you would like.

Please call if you have any questions. We expect to complete the review of the remaining Highlands samples no later than August 31.

Marvelyn

Marvelyn Humphrey

Chief, Lab Support & External Oversight Section
Environmental Services Branch
US EPA Region 6 Laboratory
10625 Fallstone Road
Houston, TX 77099
office: 281-983-2140
humphrey.marvelyn@epa.gov

ATTACHMENT

(Data Review Report – August 17, 2016)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
ENVIRONMENTAL SERVICES BRANCH
10625 FALLSTONE ROAD
HOUSTON, TX 77099-4303

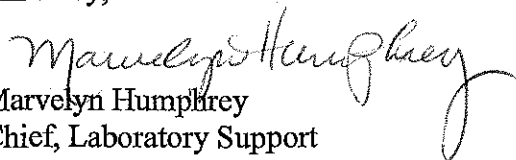
August 17, 2016

Mr. Bob Allen
Director
Harris County Pollution Control Services Department
John Phelps Courthouse Annex 4
101 South Richey, Suite H
Pasadena, TX 77506

Dear Mr. Allen:

The Environmental Services Assistance Team (ESAT), contractor to EPA Region 6 Environmental Services Branch, completed the review of the data from Xenco Laboratory for the Highlands Private Wells. The assessment of the data from the July 21, 2016 resample event is found in the enclosed data review report. If you have any questions regarding the data review report, please contact me at 281-983-2140.

Sincerely,


Marvelyn Humphrey
Chief, Laboratory Support
and Oversight Section

Enclosure:
Data Review Report

cc: Bret Kendrick
Superfund Project Manager
Risk and Site Assessment Section

ENVIRONMENTAL SERVICES ASSISTANCE TEAM

ESAT Region 6
10625 Fallstone Road
Houston, TX 77099

Alion Science and Technology

MEMORANDUM

DATE: August 15, 2016
TO: Marvelyn Humphrey, ESAT PO, Region 6 EPA
FROM: Ying-Ping Hsieh, Data Reviewer, ESAT *YH*
THRU: Dominic G. Jarecki, ESAT Program Manager, ESAT *DGJ*
SUBJECT: Data Review

Contract No.:	EP-W-13-026
TO No.:	002
Task/Sub-Task:	2-13
ESAT Doc. No.:	1602-213-0007
TDF No.:	6-16-280A
ESAT File No.:	O-1338

Attached is the data review summary for:

Site Highlands Private Wells
Date of Sampling 7/21/2016
WO # 533740

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
HOUSTON BRANCH
10625 FALLSTONE ROAD
HOUSTON, TEXAS 77099
ORGANIC REGIONAL DATA ASSESSMENT

Date of Sampling	7/21/2016	SITE	Highlands Private Wells
WO #	533740	NO. OF SAMPLES	4
LABORATORY	XENCO	MATRIX	Water
CONTRACT#	N/A	REVIEWER (IF NOT ESB)	ESAT
SOW#	Method 1613B	REVIEWER'S NAME	Ying-Ping Hsieh
Site ID#	A6NM	COMPLETION DATE	August 15, 2016

SAMPLE NO.	ES16010-012R2		
	ES16010-071R2		
	ES16010-091R2		
	ES16010-093R2		

DATA ASSESSMENT SUMMARY

Dioxin/Furan

1. HOLDING TIMES	<u>O</u>
2. GC/MS TUNE/INSTR. PERFORM.	<u>O</u>
3. CALIBRATIONS	<u>O</u>
4. BLANKS	<u>O</u>
5. LABEL COMP./CLEANUP STD. RECOVERY	<u>O</u>
6. MATRIX SPIKE/DUPLICATE/LCS/OPR	<u>O</u>
7. OTHER QC	<u>N/A</u>
8. INTERNAL STANDARDS	<u>O</u>
9. COMPOUND ID/QUANTITATION	<u>O</u>
10. PERFORMANCE/COMPLETENESS	<u>O</u>
11. OVERALL ASSESSMENT	<u>O</u>

O = Data had no problems.

M = Data qualified because of major or minor problems.

Z = Data unacceptable.

NA = Not applicable.

ACTION ITEMS:

AREA OF CONCERN:

COMMENTS/CLARIFICATIONS
REGION 6 QA REVIEW

Date of Sampling 7/21/2016 WO # 533740 SITE Highlands Private Wells
LAB XENCO

COMMENTS: This data package consisted of four water samples for Dioxin/Furan analysis following EPA Method 1613B.

S4VEM Review was performed for this data package as requested by the Region. All target compounds PCDDs/PCDFs were reviewed. All target compound results were less than the laboratory Method Reporting Limits (MRLs). The target compound of concern is 2,3,7,8-TCDD. None of the samples contained 2,3,7,8-TCDD at a concentration above the laboratory Method Reporting Limit (MRL).

OVERALL ASSESSMENT: All results are acceptable. ESAT's final data qualifiers in the DST indicate the technical usability of all reported sample results. An Evidence Audit was conducted for the data package, and the audit results were reported on the Evidence Inventory Checklist. The DST included in this report is the final version.

ORGANIC ACRONYMS

%D	Percent Difference
%RSD	Percent Relative Standard Deviation
ARO	Aroclors
BFB	4-Bromofluorobenzene
BNA	Base/Neutral and Acid
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenylphosphine
DMC	Deuterated Monitoring Compound
DST	Data Summary Table
EDM	EXES Data Manager
GC/ECD	Gas Chromatograph/Electron Capture Detector
GC/MS	Gas Chromatograph/Mass Spectrometer
GPC	Gel Permeation Chromatography
IC	Initial Calibration
INDA(B,C)	Individual Standard Mixture A(or B or C)
IS	Internal Standard
LCS	Laboratory Control Sample
LMVOA	Low/Medium Volatile Organic Analysis
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NFG	National Functional Guidelines
OTR/COC	Organic Traffic Report/Chain of Custody
PAH	Polynuclear Aromatic Hydrocarbon
PE	Performance Evaluation
PEM	Performance Evaluation Mixture
PEST	Pesticides
QA	Quality Assurance
QC	Quality Control
QL	Quantitation Limit
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RRT	Relative Retention Time
RSCC	Regional Sample Control Center
RT	Retention Time
S3VEM	Stage 3 Validation Electronic and Manual (previously called Modified CADRE Review)
S4VEM	Stage 4 Validation Electronic and Manual (previously called Standard Review)
SDG	Sample Delivery Group
SDMC	Semivolatile Deuterated Monitoring Compound
SIM	Selected Ion Monitoring
SMO	Sample Management Office
SOW	Statement of Work
SQL	Sample Quantitation Limit
SVOA	Semivolatile Organic Analysis
TCL	Target Compound List
TCX	Tetrachloro-m-xylene
TIC	Tentatively Identified Compound
TVOA	Trace Volatile Organic Analysis
VDMC	Volatile Deuterated Monitoring Compound
VOA	Volatile Organic Analysis

HEADER DEFINITIONS FOR DIOXIN EXCEL DST

CASE: Case Number

SDG: SDG Number

EPASAMP: EPA Sample Number

LABID: Laboratory File/Sample ID

MATRIX: Sample Matrix

ANDATE: Sample Analysis Date

ANTIME: Sample Analysis Time

SPLEWT: Sample Weight

FINALVOL: Final Sample Extract Volume

CASNUM: Compound CAS Number

ANALYTE: Compound Name

CONC: Compound Concentration

VALDQAL: Region 6 Organic Data Validation Qualifier (see Organic Data Qualifier Definitions on the next page)

UNITS: Concentration Units

EMPC: Estimated Maximum Possible Concentration

EDL: Estimated Detection Limit

ADJMRL: Adjusted method reporting limit value

SMPDATE: Sampling Date

STATLOC: Station Location

Disclaimer: ESAT verified the accuracy of the information reported in the Excel DST only for the following data fields: CASE, SDG, EPASAMP, MATRIX, ANALYTE, CONC, UNITS, VALDQAL, and ADJCRQL. The data qualifiers in the VALDQAL column indicate the technical usability of the reported results.

ORGANIC DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the ESAT-Region 6 qualifiers assigned to results in the Data Summary Table.

- U Not detected at reported quantitation limit.
- N Identification is tentative.
- J Estimated value.
- L Reported concentration is below the method reporting limit.
- M Reported concentration should be used as a raised quantitation limit because of interferences and/or laboratory contamination.
- R Unusable.
- ^ High biased. Actual concentration may be lower than the concentration reported.
- ✓ Low biased. Actual concentration may be higher than the concentration reported.
- F+ A false positive exists.
- F- A false negative exists.
- UJ Estimated quantitation limit.
- T Identification is questionable because of absence of other commonly coexisting pesticides.
- C Identification of pesticide or Aroclor has been confirmed by Gas Chromatography/Mass Spectrometer (GC/MS).
- X Identification of pesticide or Aroclor could not be confirmed by GC/MS when attempted.
- * Result not recommended for use because of associated QA/QC performance inferior to that from other analysis.

Summary of Dioxins and Furans (with EPA Region 6 Data Review Qualifiers)

Sample ID	Date	2,3,7,8-TCDD pg/L	1,2,3,7,8-PeCDD pg/L	1,2,3,6,7,8-HxCDD pg/L	1,2,3,4,7,8-HxCDD pg/L	1,2,3,7,8,9-HxCDD pg/L	1,2,3,4,6,7,8-HpCDD pg/L	Octachlorodibenzo-p-dioxin (OCDD) pg/L	2,3,7,8-Tetrachlorodibenzofuran pg/L	1,2,3,7,8-PeCDF pg/L	2,3,4,7,8-PeCDF pg/L	1,2,3,4,7,8-HxCDF pg/L	1,2,3,6,7,8-HxCDF pg/L	1,2,3,7,8,9-HxCDF pg/L	2,3,4,6,7,8-HxCDF pg/L	1,2,3,4,6,7,8-HpCDF pg/L	1,2,3,4,7,8,9-HpCDF pg/L	Octachlorodibenzofuran (OCDF) pg/L	Total TEQ pg/L
Residential	GW _{leg}	30	30	300	300	300	3000	100000	300	1000	100	300	300	300	3000	3000	3000	100000	30
Toxicity Equivalency Factor (TEF)		1.00	1.00	0.10	0.10	0.10	0.01	0.0003	0.10	0.03	0.30	0.10	0.10	0.10	0.10	0.01	0.01	0.0003	
ES16010-012R2	7/21/2016	<0.271	0.702 L J	0.283 L J	<0.224	<0.246	<0.716	<0.459	<0.332	<0.439	<0.203	<0.157	<0.361	<1.09	<0.327	<0.321	<0.721	<0.542	1.15
ES16010-071R2	7/21/2016	<0.256	<0.294	0.591 L J	<0.298	<0.413	<0.811	<1.79	0.291 L J	<0.691	<0.691	<0.589	<0.661	<0.979	<0.831	<0.786	<0.67	<1.11	0.992
ES16010-091R2	7/21/2016	<0.249	0.66 L J	<0.233	<0.221	<0.319	<0.887	<6.01	<0.342	<0.444	<0.276	<0.451	<0.207	<0.567	<0.393	<0.182	<0.242	<0.592	1.13
ES16010-093R2	7/21/2016	<0.233	<0.317	0.535 L J	<0.203	<0.379	<0.372	<0.823	<0.293	<0.495	<0.182	<0.147	<0.314	<0.785	<0.215	<0.203	<0.37	<0.63	0.617

Notes:
 <: Analyte was not detected at or above the reported sample detection limit
 L: Analyte was detected at the concentration less than the method reporting limit
 J: Estimated value
 TEQ: Toxicity Equivalency Quotient

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

 WO # 533740

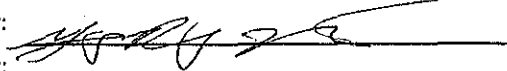
 Date of Sampling 7/21/16

SDG Nos. To Follow Mod. Ref No. _____

 Date Rec. 8/5/16

EPA Lab ID: <u>XENCO</u> Lab Location: <u>Stafford, TX</u> Region: <u>6</u> Audit No.: <u>533740 (7/21/16)</u> Re_Submitted CSF? Yes No <u>X</u> Box No(s): <u>1</u> COMMENTS:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;">ORIGINALS</th> <th style="width: 5%;">YES</th> <th style="width: 5%;">NO</th> <th style="width: 10%;">N/A</th> </tr> </thead> <tbody> <tr> <td>CUSTODY SEALS</td> <td></td> <td></td> <td></td> </tr> <tr> <td>1. Present on package?</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>2. Intact upon receipt?</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>FORM DC-2</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3. Numbering scheme accurate?</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>4. Are enclosed documents listed?</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>5. Are listed documents enclosed?</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>FORM DC-1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>6. Present?</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>7. Complete?</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>8. Accurate?</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>TRAFFIC REPORT /CHAIN-OF-CUSTODY RECORD(s)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>9. Signed?</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>10. Dated?</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>AIRBILLS/AIRBILL STICKER</td> <td></td> <td></td> <td></td> </tr> <tr> <td>11. Present?</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>12. Signed?</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>13. Dated?</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>SAMPLE TAGS</td> <td></td> <td></td> <td></td> </tr> <tr> <td>14. Does DC-1 list tags as being included?</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>15. Present?</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>OTHER DOCUMENTS</td> <td></td> <td></td> <td></td> </tr> <tr> <td>16. Complete?</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>17. Legible?</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>18. Original?</td> <td></td> <td>X</td> <td></td> </tr> <tr> <td>18a. If "NO", does the copy indicate where original documents are located?</td> <td>X</td> <td></td> <td></td> </tr> </tbody> </table>	ORIGINALS	YES	NO	N/A	CUSTODY SEALS				1. Present on package?			X	2. Intact upon receipt?			X	FORM DC-2				3. Numbering scheme accurate?			X	4. Are enclosed documents listed?			X	5. Are listed documents enclosed?			X	FORM DC-1				6. Present?			X	7. Complete?			X	8. Accurate?			X	TRAFFIC REPORT /CHAIN-OF-CUSTODY RECORD(s)				9. Signed?	X			10. Dated?	X			AIRBILLS/AIRBILL STICKER				11. Present?			X	12. Signed?			X	13. Dated?			X	SAMPLE TAGS				14. Does DC-1 list tags as being included?			X	15. Present?			X	OTHER DOCUMENTS				16. Complete?	X			17. Legible?	X			18. Original?		X		18a. If "NO", does the copy indicate where original documents are located?	X		
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Over for additional comments.

 Audited by: 
 Audited by: _____

Signature

Ying-Ping Hsieh / ESAT Data Reviewer

Printed Name/Title

 Date 8/10/16

Date _____

DC-2__



Setting the Standard since 1950
 Stafford, Texas (281-240-4200)

Dallas, Texas (214-902-0300)

Service Center - San Antonio, Texas (210-509-3334)

CHAIN OF CUSTODY

Page 1 of 1

Odessa, Texas (432-563-1800)

Lakeland, Florida (863-846-8528)

Norcross, Georgia (770-449-8800)

Tampa, Florida (813-620-2000)

Xenco Quote #

Xenco Job #

533140

www.xenco.com

Client / Reporting Information		Project Information		Analytical Information														Matrix Codes	
Company Name / Branch:		Project Name/Number:																A= Air S = Soil/Sed/Solid GW = Ground Water DW = Drinking Water P = Product SW = Surface water SL = Sludge WW= Waste Water W = Wipe O = Oil WW= Waste Water	
Company Address:		Project Location:																	
Email:		Invoice To:																	
Phone No:		PO Number:																	
Project Contact:																			
Sampler's Name:																			
No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HC	NaOH/Zn Acetate	HC03	H2SO4	NaOH	NaHSO4	MECH	NONE	Dioxins	Field Comments			
1	ES16010-012R2		7.21.16	825	W	2									X				
2	ES16010-091R2		7.21.16	845	W	2									X				
3	ES16010-073R2		7.21.16	910	W	2									X				
4	ES16010-071R2		7.21.16	930	W	2									X				
5																			
6																			
7																			
8																			
9																			
10																			

Turnaround Time (Business days)		Data Deliverable Information		Notes:	
<input type="checkbox"/> Same Day TAT	<input checked="" type="checkbox"/> 5 Day TAT	<input type="checkbox"/> Level II Std QC	<input type="checkbox"/> Level IV (Full Data Pkg/rwy data)	Preserved for dioxins	
<input type="checkbox"/> Next Day EMERGENCY	<input type="checkbox"/> 7 Day TAT	<input type="checkbox"/> Level III Std QC+ Forms	<input checked="" type="checkbox"/> TRAP Level IV		
<input type="checkbox"/> 2 Day EMERGENCY	<input type="checkbox"/> Contract TAT	<input type="checkbox"/> Level 3 (CLP Forms)	<input type="checkbox"/> UST / RG -411		
<input type="checkbox"/> 3 Day EMERGENCY		<input type="checkbox"/> TRAP Checklist			
TAT Starts Day received by Lab, if received by 3:00 pm				FED-EX / UPS Tracking #	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY					
Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	7.21.16	1	1	7.21.16	2
Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
2		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice
5		5			Temp: 16 1.9

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously

Page 9 of 9